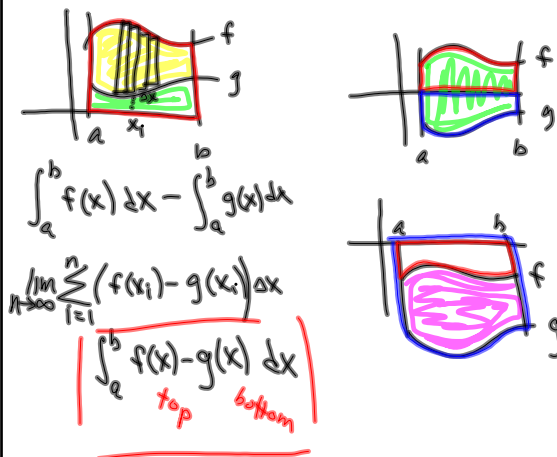


Dec 8-8:59 AM

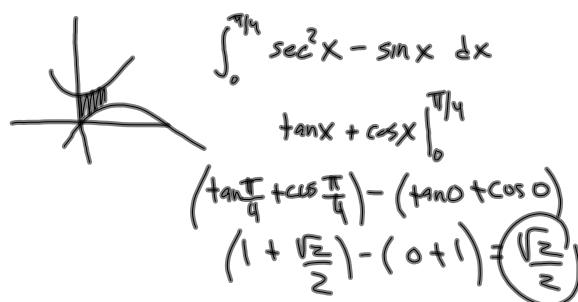
7.2 Area Between Curves

definition



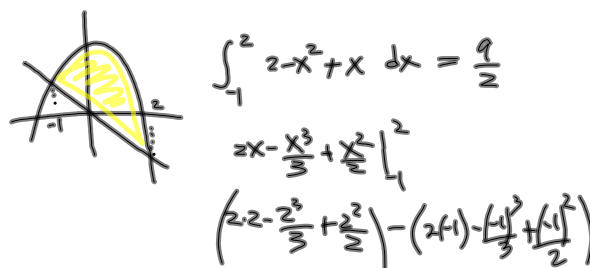
Dec 14-9:13 PM

Find the area of the region between $y = \sec^2 x$ and $y = \sin x$ from $x=0$ to $x=\pi/4$



Dec 14-9:18 PM

Find the area of the region enclosed by the parabola $y=2-x^2$ and the line $y=-x$.



Dec 14-9:33 PM

Find the area bounded above by $y = \sqrt{x}$ and below by the x-axis and the line $y = x - 2$

a) by integrating with respect to x

b) by integrating with respect to y

$$a) \int_0^4 \sqrt{x} - (x-2) dx = \frac{1}{2} \cdot 2 \cdot 2$$

$$\int_0^2 \sqrt{x} dx + \int_2^4 \sqrt{x} - (x-2) dx$$

$$\int_0^4 \sqrt{x} dx - \int_2^4 x - 2 dx$$

$$b) \sum (x_2 - x_1) \Delta y \quad \int_0^2 (y+2) - y^2 dy = \frac{10}{3}$$

Dec 14-9:35 PM

Find the area of the region enclosed by the graphs of $y = x^3$ and $x = y^2 - 2$

$x = y^{1/3}$

$$\int_{-1}^{1.713} y^{1/3} - (y^2 - 2) dy$$

$$= 4.215$$

solve $(y^{1/3} = y^2 - 2, y)$

Dec 14-9:45 PM



Dec 18-7:22 AM